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## The Gender Wage Gap and Pay Equity: Is Comparable Worth the Next Step?

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#### Summary

Women's participation in the labor market has undergone considerable change in the last few decades, with more than half of all women and of all married women now in the workforce. In addition, starting in the 1980s, the labor market qualifications of employed women increased compared to those of employed men. And, since the 1960s, both legislation and regulations have prohibited discrimination against women in employment and compensation. Although women's pay relative to men's has increased over time so that today women earn more than 76 cents for every dollar earned by men, the persistence of the wage gap despite these changes has prompted concern in some quarters about the equity or fairness of the market's wage-setting process (hence the terms "pay equity" and "fair pay").

Studies have estimated that perhaps one-half of the observed wage gap can be justified by productivity differences between the sexes (e.g., work experience and educational attainment). If women had the same human capital attributes as men, they might earn perhaps 80% as much as men. Some believe that the remaining, unexplained portion of the wage gap represents discrimination; others, an inability to accurately measure and include all factors that affect gender differences in pay.

"Comparable worth" supporters contend that corrective action is needed because discrimination relegates most women to different jobs than men and pays workers in female-dominated jobs relatively low wages. A comparable worth policy would extend the current mandate of equal pay for equal work to equal pay for equivalent work within a firm. Through such means as an unbiased job evaluation, an employer would determine those jobs that had equal total scores for such job attributes as skill, effort, responsibility, and working conditions. The employer would then raise the wages of female-dominated jobs deemed underpaid by the evaluation (i.e., jobs having wages below other jobs with the same total scores). In this manner, workers would no longer incur a wage penalty for employment in traditionally female jobs.

Under a comparable worth policy, however, the size of a worker's paycheck would be unrelated to supply/demand conditions in the labor market. Although some jobs might be highly rated in a job evaluation, they may not warrant a pay increase if there is an abundant supply of workers to perform them. In other words, legitimate (nondiscriminatory) pay differentials can exist between jobs equally rated by an evaluation. Critics regard the substitution of job evaluations for market conditions to determine relative wages as a critical flaw of comparable worth: by eliminating wage differentials between "equivalent" male- and female-dominated jobs, it would increase unemployment of women in the short run as well as remove the strongest motivation for women to overcome discrimination in the long run. Comparable worth's detractors further argue that job evaluation is a very complex and subjective procedure, and they question the policy's effectiveness at raising women's relative wages given compromises about implementation and the potential for employer evasion. (This report will be updated.)

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# The Gender Wage Gap and Pay Equity: Is Comparable Worth the Next Step?

Women's participation in the labor market has undergone considerable change in the last few decades. Women comprised 47% of all workers in 2002, up from 33% in 1960. More than one-half of the noninstitutional female population age 16 or older has been in the paid work force since 1979, according to U.S. Bureau of Labor Statistics' data. The majority of today's married women have forsaken the traditional role of full-time child care givers for the dual role of unpaid homemakers and paid workers.

Over the same period, legislation was enacted with the intent of mitigating labor market discrimination against women among other groups. The Equal Pay Act of 1963, an amendment to the Fair Labor Standards Act, mandates equal pay for men and women employed in the same or substantially same jobs in a firm. The Civil Rights Act of 1964 prohibits discrimination in employment and compensation against women and other protected classes of workers. E.O. 11246 also forbids labor market discrimination and requires affirmative action for protected classes of workers at federal contractors and subcontractors.

One constant over time, however, has been the lower wages of women compared to men. The persistence of the gender wage gap in the face of workplace antidiscrimination edicts and of significant changes in women's labor force participation has prompted concern in some quarters about the "equity" or "fairness" of the market's wage-setting process.

It is contended that corrective action, which goes beyond current law, is needed because ongoing discrimination against women is distorting the allocation of human resources and creating inefficiencies in the labor market. Others believe that the pay gap reflects differences in freely chosen labor market qualifications between the sexes that legitimately affect relative wages. They assert that as the work expectations, schooling, and labor market experience of women and men continue to converge, the wage gap will narrow further in the absence of additional intervention, which could itself impede economic efficiency.

This report examines the trend in the male-female wage gap and the explanations offered for its existence. Remedies proposed for the gender wage gap's amelioration are addressed, with an in-depth focus on the comparable worth approach to achieving "pay equity" or "fair pay" between women and men.

#### The Male-Female Wage Gap

The issue termed pay equity or more recently, fair pay, originates from the chronic fact that women as a group are paid less than men. In 1960, half of all women employed year-round full-time (i.e., 50-52 weeks, at least 35 hours per week) earned more than \$3,257 and half earned less than that amount; in the same year, the median annual earnings of men employed year-round full-time were \$5,368. More than 4 decades later, according to U.S. Bureau of the Census data for 2001, the median earnings of women with a strong commitment to the workforce were \$29,215 while those of men were a substantially greater \$38,275.

It is often noted that even when comparisons are made between similar groups, women still earn less than men. Women with a bachelor's degree earned \$36,913 in 2001, while similarly educated men earned an average of \$63,354. Male high school graduates were paid \$32,363 on average, well above the \$20,489 paid to female high school graduates. Women typically earn less than men of the same age, as well. The wage gap is narrowest among young adults, and then it generally widens: according to Census Bureau data for 2001, female 18-24 year olds were paid 87% as much as male 18-24 year olds; female 25-34 year olds earned 74% as much as males in the same age group; female 35-44 year olds and 45-54 year olds, 58%; and, female 55-64 year olds were paid 54% as much as male 55-64 year olds. Although these disparities between seemingly similar groups of men and women sometimes are taken as proof of sex-based wage discrimination, they have not been adjusted to reflect gender differences in *all* characteristics — such as differences in school course work — that can legitimately affect relative wages. These differences will be addressed in the next section of this report.

The size of the male-female wage gap has shrunk at a slow and uneven pace over the years. (See **Table 1**) In the 1960s and 1970s, women earned less than 60 cents for every dollar earned by men. The gap narrowed steadily during the 1980s, so that by the end of the decade women were being paid about 70 cents on the dollar. The trend for the 1990s is unclear: according to the data series on annual earnings (columns 2 and 5) and on weekly earnings (columns 3 and 6), the ratio of female-to-male wages fluctuated erratically over the period; and ratios derived from the two series moved in different directions (e.g., between 1997 and 1999, one series showed a widening of the wage gap while the other showed a narrowing). Despite substantial changes in women's labor force participation over the last few decades, the observed or unadjusted wage gap has narrowed by about 15 percentage points. (Reasons suggested for the lack of convergence in the male-female wage gap through the 1970s and for its improvement during the 1980s are discussed later in this report.)

<sup>&</sup>lt;sup>1</sup> According to one analysis, a portion of the wage gap between male and female college graduates is due to gender differences in majors which, in turn, affect the occupations and industries in which college graduates subsequently work. In contrast, differences in high school course work between the sexes were estimated to have little impact on the wage gap of that educational group. Charles Brown, and Mary Corcoran, "Sex-Based Differences in School Content and the Male-Female Wage Gap," *Journal of Economic Literature*, vol. 15, no. 3, part 1, Jul. 1997.

Table 1. Ratio of Female-to-Male Earnings

Year	Year-round full-time workers <sup>a</sup>	Full-time workers <sup>b</sup>	Year	Year-round full-time workers <sup>a</sup>	Full-time workers <sup>b</sup>
2002	_	77.5	1980	60.2	64.4
2001	76.3	76.1	1979	59.7	62.5
2000	73.7	76.0	1978	59.4	n.a.
1999	72.2	76.5	1977	58.9	n.a.
1998	73.2	76.3	1976	60.2	n.a.
1997	74.2	74.4	1975	58.8	n.a.
1996	73.8	75.0	1974	58.8	n.a.
1995	71.4	75.5	1973	56.6	n.a.
1994	72.0	76.4	1972	57.9	n.a.
1993	71.5	77.1	1971	59.5	n.a.
1992	70.8	75.8	1970	59.4	n.a.
1991	69.9	74.2	1969	58.9	n.a.
1990	71.6	71.9	1968	58.2	n.a.
1989	68.7	70.1	1967	57.8	n.a.
1988	66.0	70.2	1966	57.6	n.a.
1987	65.2	70.0	1965	59.9	n.a.
1986	64.3	69.2	1964	59.1	n.a.
1985	64.6	68.2	1963	58.9	n.a.
1984	63.7	67.8	1962	59.3	n.a.
1983	63.6	66.7	1961	59.2	n.a.
1982	61.7	65.4	1960	60.7	n.a.
1981	59.2	64.6	_	_	<u> </u>

**Source:** Series on year-round/full-time workers, the U.S. Bureau of the Census; series on full-time workers, the U.S. Bureau of Labor Statistics.

**Note:** The wage gap based on annual data is wider than the wage gap based on weekly data because women generally work fewer weeks and hours per week than men, and because the annual data cover self-employed workers who have larger earnings differences than the wage and salary workers covered by the weekly series. Regardless of the data series, the ratio of female-to-male earnings would be lower if all workers were compared because relatively more women than men work part-time or part-year schedules.

#### n.a. = not available

<sup>&</sup>lt;sup>a</sup> Based on median annual earnings data for all workers age 15 or older (14 or older before 1980) who worked year-round full-time (i.e., 50-52 weeks in a year and at least 35 hours in a week), including the self-employed. Before 1989, earnings covered civilian workers only.

<sup>&</sup>lt;sup>b</sup> Based on median weekly earnings data for wage and salary workers age 16 or older who worked fulltime.

#### Reasons Suggested for the Wage Gap

The persistence of the gender wage gap has led to a search for explanations. Basically, two schools of thought have developed. The human capital explanation has a supply-side focus, that is, it looks at the personal characteristics of working women and men. The sex-segregation-in-the-workplace or discrimination explanation has a demand-side focus, that is, it looks at the characteristics of the jobs in which women and men typically work. The human capital model focuses on the voluntary choices made by women; the discrimination model, on the restrictions faced by women.

#### **The Human Capital Explanation**

One school of thought asserts that women earn less than men because of the division of labor within the family which results in productivity differences between the sexes.<sup>2</sup> Anticipated family responsibilities are believed to influence women's decisions about the amount and kind of investment in education/training (e.g., number of years of schooling, subject matter of course work, and general versus firm-specific training) as well as the length and pattern of time devoted to market work (i.e., total years and timing of work experience, intermittent/continuous participation, and part-time/part-year or full-time/full-year schedules). Because women expect to spend fewer years than men in the labor force, it is less profitable for women to invest in market-oriented skills. According to the human capital explanation, then, women's smaller human capital investment lowers their productivity, and hence their earnings, relative to men's.

The discontinuous employment history of women is thought to further depress their relative wages.<sup>3</sup> Because skills deteriorate with prolonged non-use, women's wages upon reentering the labor force initially are lower than their wages had been when they exited the labor force to bear and care for their children. It is argued that women who anticipate moving in and out of the labor force choose to enter occupations having the least earnings penalty for intermittent employment, that is, occupations having the lowest rate of skill depreciation. Therefore, women more so

<sup>&</sup>lt;sup>2</sup> Jacob Mincer, and Solomon Polachek, "Family Investments in Human Capital: Earnings of Women," *Journal of Political Economy*, vol. 82, part 2, Mar./Apr. 1974; and, Jacob Mincer, and Solomon Polachek, "Women's Earnings Re-examined," *Journal of Human Resources*, vol. 13, no. 1, winter 1978.

<sup>&</sup>lt;sup>3</sup> Solomon Polachek, "Occupational Segregation among Women: Theory, Evidence, and a Prognosis," in Cynthia B. Lloyd, with Emily S. Andrews and Curtis L. Gilroy (eds.) *Women in the Labor Market*, (NY: Columbia University Press, 1979); Solomon Polachek, "Occupational Self-Selection: A Human Capital Approach to Sex Differences in Occupational Structure," *Review of Economics and Statistics*, vol. 63, no. 1, 1981; Jacob Mincer, and Haim Ofek, "Interrupted Work Careers: Depreciation and Restoration," *Journal of Human Resources*, vol. 17, no. 1, winter 1982; Moon-Kak Kim, and Solomon Polachek, "Panel Estimates of Male-Female Earnings Functions," *Journal of Human Resources*, vol. XXIX, no. 2, spring 1994; and Audrey Light, and Manuelita Ureta, "Early Career Work Experience and Gender Differentials," *Journal of Labor Economics*, vol. 13, no. 1, Jan. 1995.

than men would prefer employment in jobs in which wage growth is not closely linked to skill accumulation generally and firm-specific training particularly. As a result of this preference,<sup>4</sup> women who do not expect to work continuously would want jobs that offer a smaller reward for additional work experience (i.e., jobs with a flatter experience-earnings profile) than would continuous workers. Human capital theory thus not only attempts to explain the relatively lower wages of women, but also the difference in the occupational distributions of men and women.

The division of labor within the family could have a more direct impact on women's wages than through its effect on human capital accumulation. Married women continue to be largely responsible for child care and other energy-intensive household responsibilities.<sup>5</sup> Because they consequently expend more effort than men on these family duties, it arguably reduces the effort that women can put into market work. If wages and market work intensity are positively related, then married women's wages will be lower than those of married men — even for workers having the same human capital endowments.<sup>6</sup> Some analysts also believe that household duties affect married women's occupational preferences by encouraging them to seek less-demanding jobs which allow them to economize on the energy they expend on market work.<sup>7</sup>

Researchers have tried to explain the existence of the wage gap by estimating the proportion that is due to differences in the average amounts of human capital accumulated by female and male workers. The residual or unexplained portion of the pay differential is due to differences in the rates of return (reward) to working women and men with the same productivity-related characteristics. Because productivity rarely can be directly observed, commonly used proxies include amount and quality

<sup>&</sup>lt;sup>4</sup> The human capital explanation assumes that individuals' preferences/choices are voluntary, and does not consider the possibility of pre-labor market (societal) discrimination. For example, social norms/customs may constrain women's ideas about appropriate careers (e.g., becoming a nurse rather than a doctor). For more information on the relationship between socialization and occupational choice, see Margaret Mooney Marini, and Mary C. Brinton, "Sex Typing in Occupational Socialization," in Barbara F. Reskin (ed.) *Sex Segregation in the Workplace: Trends, Explanations, Remedies*, Washington, D.C., National Academy Press, 1984.

<sup>&</sup>lt;sup>5</sup> There is evidence to suggest that, in the 1980s, husbands increased the number of hours they were involved in housework, which is a departure from the pattern that prevailed in the 2 prior decades. Nonetheless, married women still spend many more hours than their husbands performing unpaid housework. Francine Blau, *Trends in the Well-Being of American Women*, 1970-1995, Working Paper 6206, Cambridge, Mass., National Bureau of Economic Research, Oct. 1997.

<sup>&</sup>lt;sup>6</sup> According to one analysis, gender differences in personal and job characteristics explain 27-30% of the wage gap when housework was not considered; when the gender difference in housework was taken into account, about 38% of the wage gap could be explained. Joni Hersch, and Leslie S. Stratton, "Housework, Fixed Effects, and Wages of Married Workers," *Journal of Human Resources*, vol. 32, no. 2, spring 1997.

<sup>&</sup>lt;sup>7</sup> Gary S. Becker, "Human Capital, Effort, and the Sexual Division of Labor," *Journal of Labor Economics*, vol. 3, no. 1, Jan. 1985 supplement.

of formal education, on-the-job training, hours of work, job tenure, and amount and continuity of labor market experience.

While, to some, the unexplained portion of the gender pay gap indicates the existence of sex-based wage discrimination, to others it indicates the limits of knowledge. For the residual to solely reflect discrimination — that is, all earnings differences between the sexes not accounted for by differences in their human capital attributes — then all relevant variables must be included in the empirical studies and the included variables must be measured accurately. However, productivity characteristics may be omitted from studies because they are difficult or impossible to measure (e.g., motivation) or are not included in a particular data set (e.g., field of specialization in school), and they may be imprecisely measured (e.g., use of potential rather than actual work experience).

Based on its review of seven empirical studies, the National Academy of Sciences found that less than one-half of the wage gap between the sexes could be explained by human capital variables alone. While this finding lends credence to some researchers questioning of the ability of the skill depreciation hypothesis to account for the wage gap over the long-run and to explain the different occupational distributions of women and men, it also reflects the inherent difficulty of accurately measuring all productivity-related characteristics. In addition, the finding gives support to claims that factors other than productivity affect wages, including the presence and strength of unions, the industry of employment, and firm size.

#### The Discrimination Explanation

In contrast to human capital theorists, other researchers look to job-related variables as justification for the existence of the wage gap. Some focus particularly on the relationship between sex segregation in the workplace and women's comparatively low wages. Segregation encompasses the clustering of women and men in different occupational groups, in different occupations within these groups, in different jobs within these occupations, and in different industries or firms performing the same jobs.

<sup>&</sup>lt;sup>8</sup> Donald J. Treiman, and Heidi I. Hartmann (eds.) *Women, Work, and Wages: Equal Pay for Jobs of Equal Value*, Washington, D.C., National Academy Press, 1981. (Hereafter cited as Treiman and Hartman, *Women, Work, and Wages.*)

<sup>&</sup>lt;sup>9</sup> Paula England, "The Failure of Human Capital Theory to Explain Occupational Sex Segregation," *Journal of Human Resources*, vol. 17, no. 3, summer 1982; John M. Abowd, and Mark R. Killingsworth, "Sex, Discrimination, Atrophy, and the Male-Female Wage Differential," *Industrial Relations*, vol. 22, no. 3, fall 1983; Mary Corcoran, with Greg J. Duncan, and Michael Ponza, "Work Experience, Job Segregation, and Wages," in Reskin, *Sex Segregation in the Workplace*; and Allison J Wellington, "Changes in the Male/Female Wage Gap, 1976-1985," *Journal of Human Resources*, vol. 28, no. 2, spring 1993. (Hereafter cited as Wellington, *Changes in the Male/Female Wage Gap*.)

**Sex Segregation by Occupation.** The occupational distributions of men and women have become more similar over the years. In the 1960s, occupational segregation of the sexes declined somewhat, due partly to the movement of men into female-intensive jobs (e.g., elementary school teachers, librarians, and social workers). In the 1970s, gender segregation decreased to a greater extent, due primarily to both men and women entering neutral occupations. Women also increased their presence in a few male-dominated occupations during the 1970s, with the greatest inroads being made in the rapidly expanding occupational groups of executive, administrative, and managerial workers as well as professional workers.

The occupational distributions have kept converging over the ensuing decades, but at a progressively slower pace compared to the 1970s. <sup>12</sup> While men and women decreased their shares of employment in male- and female-dominated occupations respectively between 1985 and 1995, there was little movement of women into male-dominated and of men into female-dominated occupations. Most of the gain in occupational similarity through the mid-1990s resulted from women's increased presence in occupations that are 60-80% female and from men's increased presence in occupations that are 60-80% male.

Women and men still are concentrated in different occupations, and "it appears that, without drastic social change, substantial movement toward desegregation is unlikely by the turn of the century." In 1995, for example, 4% of women were employed in male-dominated occupations, 58% were employed in gender neutral occupations, and 38% were employed in female-dominated occupations. The degree of sex segregation by occupation is quite sensitive to the definition of these three groups: if instead of 80%, female-dominated occupations are defined as those in which women comprised 70% or more of total employment, then 55% of women were in female-dominated occupations in 1995; and, if a 60% cutoff were used, then 61% of women worked in female-dominated occupations.

<sup>&</sup>lt;sup>10</sup> Cynthia H. Chertos, Lois Haignere, and Ronnie J. Steinberg, *Occupational Segregation and Its Impact on Working Women*, NY, Center for Women in Government, 1982.

<sup>&</sup>lt;sup>11</sup> Nancy F.Rytina, and Suzanne M. Bianchi, "Occupational Reclassification and Changes in Distribution by Gender," *Monthly Labor Review*, Mar. 1984. Neutral occupations were defined as having between 21% and 59% female employment; male-dominated occupations were defined as employing 20% or fewer women; and, female-dominated occupations as employing 60% or more women.

<sup>&</sup>lt;sup>12</sup> Barbara H. Wooton, "Gender Differences in Occupational Employment," *Monthly Labor Review*, Apr. 1997. (Hereafter cited as Wooten, *Gender Differences in Occupational Employment*.)

<sup>&</sup>lt;sup>13</sup> Joyce P. Jacobsen, "Trends in Work Force Sex Segregation, 1960-1990," *Social Science Quarterly*, vol. 75, no. 1, Mar. 1994, p. 209.

<sup>&</sup>lt;sup>14</sup> Wooton, Gender Differences in Occupational Employment.

Why Does Segregation Depress Women's Relative Wages? The crowding hypothesis offers one explanation of why occupational segregation is associated with lower earnings for women relative to men. <sup>15</sup> According to this theory, women are excluded from many jobs due to the discriminatory tastes of employers, male employees, or customers. Because women have access to only a limited number of occupations, the supply of labor to those occupations increases which, in turn, reduces the capital-to-labor ratio. As a result, the productivity and wages of both women and men in the crowded, female-intensive occupations are depressed. Similarly, productivity and wages in male-dominated occupations are higher than they would otherwise be the case because the supply of labor to them is restricted. Discrimination, it is asserted, prevents labor mobility between the two sets of occupations which would equalize wages between male and female workers with the same human capital endowments.

The dual labor market theory offers another explanation for the relationship between occupational segregation and the wage gap. According to this model, the labor market has both primary and secondary sectors. The former is comprised of jobs having opportunities for advancement, offering good wages and working conditions, and providing job security. The latter is comprised of dead-end jobs, with low wages, poor working conditions, and substantial employee turnover. Because primary sector jobs require firms to invest in employee training, wage differentials can arise from this market segmentation. Primary sector employers will want to hire stable workers so that they have some assurance of recouping their training costs. Since women historically have tended to move in and out of the labor force more often than men, risk-adverse employers who rely on their impressions of the relative job turnover of all men and women when deciding about hiring individual men and women (i.e., statistical discrimination) would prefer men over women for primary sector jobs. The outcome, some analysts claim, is that women are relegated to the secondary, low-paying sector of the labor market.

It is suggested that limiting women to poor job opportunities could make their alleged high turnover a self-fulfilling prophecy because the jobs provide women little reason to stay with any one employer. Labor market discrimination could have other feedback effects "if it discourages women from making human capital investments, weakens their attachment to the labor force, and provides economic incentives for the family to place priority on the husband's career." As a consequence of discrimination's feedback effects on human capital variables, then,

<sup>&</sup>lt;sup>15</sup> Barbara R. Bergmann, "Occupational Segregation, Wages and Profit When Employers Discriminate by Race or Sex," *Eastern Economic Journal*, vol. 1, no. 2 & 3, Apr. & Jul. 1974.

<sup>&</sup>lt;sup>16</sup> Peter B. Doeringer, and Michael J. Piore, *Internal Labor Markets and Manpower Analysis*, Lexington, Mass., D.C. Heath and Company, 1971.

<sup>&</sup>lt;sup>17</sup> Barbara R. Berghmann, *The Economic Emergence of Women*, NY, Basic Books Inc., 1986. (Hereafter cited as Bergmann, *The Economic Emergence of Women*.)

<sup>&</sup>lt;sup>18</sup> Francine D. Blau, with Marianne A. Ferber and Anne E. Winkler, *The Economics of Women, Men, and Work*, Upper Saddle River, N.J., Prentice Hall, 1998, p. 214. (Hereafter cited as Blau, Ferber, and Winkler, *The Economics of Women, Men and Work.*)

empirical studies that use these variables to explain the wage gap could understate discrimination's impact. Rather than the gender wage gap being due to either women's choices *or* women's constraints, the explanation likely is a mutually reinforcing combination of human capital differences between the sexes and discrimination against working women.

**Some Portion of the Wage Gap Remains Unexplained.** Studies have attributed the wage gap's existence to characteristics of both workers *and* jobs. Typical job characteristics include occupational prestige, supervisory status, union status, industry, occupation, and percent female. In those studies that adjust for differences in the employment distributions of men and women at the detailed occupational level, more of the gap is explained than in studies that adjust across major occupational groups. <sup>19</sup> This was the case among the seven empirical analyses reviewed by the National Academy of Sciences which took into account job as well as worker characteristics: all but one of the studies that used detailed occupational classifications could explain between 30% and 71% of the male-female pay differential. <sup>20</sup>

The results of empirical studies reviewed by the National Academy of Sciences and other researchers<sup>21</sup> indicate that the addition of job-related variables to human capital variables increases the ability to account for differences between the wages paid to women and men. Nonetheless, even those studies that incorporate both types of variables leave a substantial portion of the wage gap unexplained. In one study,

<sup>&</sup>lt;sup>19</sup> The greater explanatory power of studies that use more detailed occupational classifications is due to the fact that employment and earnings differences between men and women can be quite large even within occupational groups. For example, U.S. Bureau of Labor Statistics' data for 1999 show that within the major occupational group of professionals, women were 84% of elementary school teachers and men were 93% of mechanical engineers; among full-time wage and salary workers, female elementary school teachers had median weekly earnings of \$697 and male mechanical engineers had median weekly earnings of \$1,041. These intra-occupational differences are obscured in studies that use aggregate occupational categories.

<sup>&</sup>lt;sup>20</sup> Treiman and Hartmann, Women, Work, and Wages.

<sup>&</sup>lt;sup>21</sup> Other reviews of empirical work on the male-female wage gap are included in Cynthia B. Lloyd, and Beth T. Niemi, The Economics of Sex Differentials, New York, Columbia University Press, 1979; Naresh C. Agarwal, "Pay Discrimination: Evidence, Policies, and Issues," in Harish C. Jain, and Peter J. Sloane, Equal Employment: Race and Sex Discrimination in the United States, Canada, and Britain, NY, Praeger Publishers, 1981; June O'Neill, "Earnings Differentials: Empirical Evidence and Causes," in Gunther Schmid, and Renate Weitzel (eds.) Sex Discrimination and Equal Opportunity: The Labor Market and Employment Policy, NY, St. Martin's Press, 1984; Steven L. Willborn, A Comparable Worth Primer, Lexington, Mass., D. C. Health and Company, 1986; Cain, Glen G. Cain, "The Economic Analysis of Labor Market Discrimination: A Survey," in Orley Ashenfelter, and Richard Layard (eds.), Handbook of Labor Economics, vol. 1. Netherlands, Elsevier Science Publishers, 1986; Francine D. Blau, and Marianne A. Ferber, "Discrimination: Empirical Evidence from the United States," American Economic Review, May 1987; and, Elaine Sorenson, "The Wage Effects of Occupational Sex Composition: A Review and New Findings," in M. Anne Hill and Mark R. Killingsworth (eds.) Comparable Worth: Analyses and Evidence, Ithaca, NY, ILR Press, 1989.

for example, taking human capital variables into account left 67.1% of the gender pay gap unexplained while the addition of job-related variables reduced the unexplained portion to 38.0%.<sup>22</sup> Expressed another way, women working full-time were estimated to have earned 72% as much as men on average; this was the observed or unadjusted ratio. According to the analysis, if women had the same human capital attributes as men, they would have earned 80.5% as much as men, and if women had the same occupational, industrial, and union characteristics as men, the adjusted ratio would have been 88.2%.

One of the job characteristics frequently included in empirical analyses, such as the one described above, is occupation. However, to the extent that the difference in occupational distributions of women and men

partly reflects employment discrimination or unequal occupational access ... then clearly this gender difference cannot legitimately be used to help "explain" the gender wage gap.<sup>23</sup>

In other words, the result of including occupation as an explanatory variable is underestimation of labor market discrimination to the degree that gender differences in occupational distributions reflect discrimination rather than personal preferences. The *feedback effect of discrimination* on other variables commonly included in empirical analyses (e.g., job tenure and unionization) also would lead to understatement of discrimination's impact on women's relative wages.<sup>24</sup>

Because neither discrimination nor productivity can be measured directly, it is likely that debate will continue on precisely how much of the wage gap is due to each of them. By extension, disagreement also will continue about whether remedial action is needed; and, if so, what kind of action.

#### Reasons Suggested for the Trend in the Wage Gap

As shown in **Table 1**, the wage gap has narrowed gradually and sporadically over the years. Some assert that the intransigence of discrimination, despite enforcement of equal pay and employment legislation, accounts for the slow and fitful erosion of the wage gap. Others conclude that it is related to, among other things, the timing of market skill convergence between the sexes and to non-gender-specific changes in the labor market.

<sup>&</sup>lt;sup>22</sup> Blau, Ferber, and Winkler, *The Economics of Women, Men, and Work*.

<sup>&</sup>lt;sup>23</sup> Michael P. Kidd, and Michael Shannon, "Does the Level of Occupational Aggregation Affect Estimates of the Gender Wage Gap?," *Industrial and Labor Relations Review*, vol. 49, no. 2, Jan. 1996.

<sup>&</sup>lt;sup>24</sup> Morley Gunderson, "Male-Female Wage Differentials and Policy Responses," *Journal of Economic Literature*, vol. 27, Mar. 1989. (Hereafter cited as Gunderson, *Male-Female Wage Differentials and Policy Responses*.)

During much of the post-World War II period, the human capital endowments of women entering the labor force worked against contraction in the wage gap.<sup>25</sup> Working men's educational attainment increased more than working women's as a greater number of less educated than more educated women joined the labor force through the 1970s. In addition, the average work experience of employed women was held down by the entrance into the labor force of many women who had little or no prior experience. It is thus argued that the lack of skill convergence between working women and men during the 1970s kept the wage gap fairly constant, despite decreases in occupational and industrial segregation over the period.<sup>26</sup>

The situation appears to have changed in the 1980s, when the work experience and schooling of women increased relative to men. About 25% of the 1% per year reduction in the wage gap between 1976 and 1989 can be ascribed to the increase in the amount of women's work experience compared to men's, and another 35%-40% to the rise in the monetary return (reward) to an additional year of experience for women compared to men.<sup>27</sup> The relative gain in the level and reward to women's educational attainment accounted for a significant but smaller share of the wage gap's contraction.<sup>28</sup> In terms of schooling level, the incidence of college graduates among female labor force participants grew more than among male participants.<sup>29</sup> While the financial payoff for an additional year of schooling increased for all workers, the greater increase among women may be related to changes in their college schooling characteristics.<sup>30</sup>

Another 20% of the decrease in the wage gap can be attributed to the decline in wages of blue-collar workers — a predominantly male occupational group —

<sup>&</sup>lt;sup>25</sup> James P. Smith, and Michael P. Ward, *Women's Wages and Work in the Twentieth Century*, Santa Monica, Cal., The Rand Corporation, 1984.

<sup>&</sup>lt;sup>26</sup> Fields, Judith, and Edward N. Wolff. The Decline in Sex Segregation and the Wage Gap, 1970-1980. *Journal of Human Resources*, v. 26, no. 4, fall 1991.

<sup>&</sup>lt;sup>27</sup> O'Neill, June, and Solomon Polachek. Why the Gender Gap in Wages Narrowed in the 1980s. *Journal of Labor Economics*, v. 11, no. 1, part 1, January 1993. (Hereafter cited as O'Neill and Polachek, *Why the Gender Gap in Wages Narrowed in the 1980s*.)

<sup>&</sup>lt;sup>28</sup> Results from another study also suggest that the primary factor in the wage gap's narrowing was increases in women's average levels of work experience rather than of educational attainment. Wellington, Changes in the Male/Female Wage Gap, 1976-1985.

<sup>&</sup>lt;sup>29</sup> Between 1979 and 1994, for example, the share of working women aged 25-64 with a 4-year college degree rose by 8 percentage points (from 18% to 26%) while the share of working men with college degrees rose by 5 percentage points (from 24% to 29%). U.S. Bureau of Labor Statistics. *Women in the Workforce: An Overview.* Report 892. Washington, 1995.

<sup>&</sup>lt;sup>30</sup> In a study of young workers with college educations, it was estimated that changes in college major and grades accounted for much of the decrease in the group's gender wage gap. While changes in the distribution of college majors among women contributed to the narrowing of the pay differential, more of the narrowing may be explained by increasing monetary rewards to women's skills compared to men's skills within a given major. (College grades was the measure of skills used in the study.) Loury, Linda Datcher. The Gender Earnings Gap Among College-Educated Workers. *Industrial and Labor Relations Review*, v. 50, no. 4, July 1997.

compared to white-collar workers.<sup>31</sup> Thus, changes in the labor market during the 1980s also seem to have had an impact on the gender wage gap. In other words, some non-gender-specific factors affected men and women differently. For example, decreases in unionization and employment shifts by industry (e.g., away from manufacturing) lowered men's wages more so than women's, thereby narrowing the earnings differential between the two.<sup>32</sup>

In contrast, the gender pay gap shrank in the face of increasingly unfavorable changes in the wage structure for low-wage male and female workers over the period, namely, widening wage inequality and increasing returns to skill. It is estimated that these two factors dampened the decrease in the wage gap — "reclaiming" between one-third and two-fifths of women's potential increase in relative pay.<sup>33</sup> However, women's relatively large gains in work experience and in occupational upgrading (e.g., women's increased presence in professional and managerial occupations) were more than enough to offset this adverse, non-gender-specific factor and enable the pay gap to diminish in the 1980s.

The unexplained portion of the wage gap appears to have decreased during the 1980s as well. Interpretations of this finding are ambiguous, however: the improvement in women's unmeasured labor market attributes or a decline in discrimination, or some combination of the two, could have reduced the residual.<sup>34</sup> As women's relative level of measured productivity characteristics increased over the decade (e.g., work experience and occupational upgrading), it is possible that unaccounted for personal characteristics (e.g., work expectations and job motivation) also improved among women compared to men. As a result of women's increased commitment to the labor force and enhancement of their job skills during the 1980s, it is possible that employers' rationale for statistical discrimination may have diminished as well.

Although the unexplained portion of the gender pay gap has diminished, it does not mean that labor market discrimination has been vanquished. All other things being equal, women's wages remain lower than those of men. The decrease in the unexplained portion of the wage gap might have been related to either a reduction in discrimination, limitations of data sets and statistical techniques, or some combination of the two. Observers diverge in the credence they give to each of these explanations.

<sup>&</sup>lt;sup>31</sup> O'Neill and Polachek, Why the Gender Pay Gap in Wages Narrowed in the 1980s.

<sup>&</sup>lt;sup>32</sup> Blau, Francine, and Lawrence M. Kahn. Swimming Upstream: Trends in the Gender Wage Differential in the 1980s. *Journal of Labor Economics*, v. 15, no. 1, part 1, January 1997.

<sup>&</sup>lt;sup>33</sup> *Ibid*.

<sup>&</sup>lt;sup>34</sup> Blau, Trends in the Well-Being of American Women, 1970-1995.

#### **Policy Responses**

Policy responses to the gender wage gap depend upon where the roots of the pay differential are thought to lie. Their effectiveness in raising the wages of women relative to men depends, in part, upon how much of the gap really is associated with each causal factor.

The explanations and remedies presented below are not necessarily mutually exclusive. For example, both socialization and employment discrimination might affect women's occupational distributions and wages; and consequently, multiple remedies would be appropriate.

#### **Explanations and Remedies**

Some think that even before women enter the labor market their career aspirations are shaped by societal factors which individuals, such as parents or peers, and institutions, such as schools or the media, inculcate in youngsters.<sup>35</sup> Proponents of this viewpoint would support measures directed at schools (e.g., Title IX of the 1972 Education Amendments, 1976 Vocational Education Amendment, and Women's Educational Equity Act) and at acquainting girls with role models employed in a broad range of jobs (e.g., Ms. Foundation for Women initiated "Take Our Daughters to Work Day" in 1995).

Others conclude that the wage gap is due to measured and unmeasured human capital differences between the sexes. They would argue that additional government intervention in the labor market is unnecessary because ongoing relative improvements in women's productivity characteristics will cause the wage gap to shrink further. With women continuing to opt for market work as a major lifetime activity, human capital theory suggests that women will increasingly make occupational choices that differ from those they made in the past which should, in turn, raise their relative wages.

Still others believe that labor market discrimination is responsible for the portion of the wage gap that cannot be explained by gender differences in productivity-related characteristics. Policy responses that these observers would support range from strengthened government enforcement of antidiscrimination laws and regulations, <sup>36</sup> to government dissemination of information about and provision of training in comparatively high-paying nontraditional jobs for women, <sup>37</sup> to

<sup>&</sup>lt;sup>35</sup> This has been referred to as societal or pre-labor market discrimination. See footnote 4.

<sup>&</sup>lt;sup>36</sup> The two primary agencies charged with enforcing existing labor market antidiscrimination policies are the Equal Employment Opportunity Commission and the U.S. Department of Labor's Office of Federal Contract Compliance Programs.

<sup>&</sup>lt;sup>37</sup> In terms of nontraditional employment policy, P.L. 102-530 (Women in Apprenticeship and Nontraditional Occupations Act, WANTO) provides technical assistance to employers and labor unions to promote women's employment in apprenticeable and other nontraditional occupations. P.L. 102-235 (Nontraditional Employment for Women Act), (continued...)

employers paying their female and male employees in comparable jobs the same wages.

#### **Comparable Worth**

The last approach has commonly been referred to as comparable worth. Comparable worth would extend the current mandate that an employer pay equal wages to workers in the same or substantially same jobs in a firm, to an employer paying equal wages to workers in equivalent jobs in a firm. Equivalent jobs typically have been defined as those whose performance involves commensurate skill (e.g., education and training requirements), effort, responsibility, and working conditions.

The idea motivating comparable worth is that the size of a worker's paycheck should be related to job content and not related to the predominant sex of employees in an occupation. Comparable worth proponents argue that some jobs are undervalued — that is, pay relatively low wages — *because* they are largely held by women. Some also believe that "the *kinds* of skills traditionally exercised by women [e.g., nurturing social skills] are valued less in wage determination than are traditionally male skills [e.g., physical or supervisory skills]." Supporters of this viewpoint thus have concluded that market-set wages are tainted by gender-based discrimination.

Rather than continuing to rely on supply and demand conditions in the labor market to determine wages, comparable worth advocates have proposed that a single job evaluation study of all jobs or key positions in a firm be conducted so they can be compared with each other in terms of such attributes as skill, effort, responsibility, and working conditions. Employers would then raise the wages of workers in all jobs or in female-dominated jobs deemed to be underpaid on the basis of the evaluation (i.e., jobs having wages below other jobs with the same total scores on the attributes included in the evaluation).

The comparable worth approach to wage determination has made the most headway in state and local governments.<sup>39</sup> Public sector unions often have played a large role in organizations making comparable worth pay adjustments.

The usual function of unions to bargain with management over wages has prompted some to suggest that the collective bargaining process may be a more effective and practical means of narrowing the gender pay gap than relying on

<sup>&</sup>lt;sup>37</sup> (...continued)

which was in effect through FY1995, authorized the use of the Job Training Partnership Act's discretionary funds to develop demonstration programs to help women enter high-paying occupations where they were underrepresented.

<sup>&</sup>lt;sup>38</sup> England, Paula. *Comparable Worth: Theories and Evidence*. NY, Walter de Gruyter, 1992. p. 40. (Hereafter cited as England, *Comparable Worth*.)

<sup>&</sup>lt;sup>39</sup> For more information, see: National Committee on Pay Equity. *Pay Equity Activity in the Public Sector*, 1979-1989. Washington, D.C., October 1989.

legislative or judicial action.<sup>40</sup> However, unions might be reluctant to press for comparable worth pay raises if they thought it would jeopardize membership solidarity. This could occur, for example, if workers in jobs determined to be overpaid through an evaluation were downgraded (i.e., had their pay cut) or redcircled (i.e., had their wage frozen at its current level or raised at a slower rate than that of underpaid workers). In addition, private sector unions have shown much less interest in the issue than have public sector unions. And, only about 15% of all workers are represented by labor unions.

**Congressional Action.** Comparable worth was considered by the 98<sup>th</sup>, 99<sup>th</sup>, and 100<sup>th</sup> Congresses. The primary focus of legislation introduced during the 1980s was the wage-setting practices of the federal government. While there was considerable debate on the issue, no legislation was enacted. (See **Appendix** for a legislative history covering this period.)

Comparable worth as a remedy for gender pay differentials continued to generate a great deal of controversy in the 1990s. When the 102<sup>nd</sup> Congress subsequently took up civil rights legislation (P.L. 102-166, the Civil Rights Act of 1991), the version considered by the House (H.R. 1) aroused dissent partly because some Members believed Section 102 (Pay Equity Technical Assistance) to be a stalking horse for eventually allowing comparable worth claims under Title VII of the Civil Rights Act of 1964, that is, allowing a job evaluation's finding of unequal pay for equally rated female- and male-dominated jobs to be used as evidence in a trial to prove the presence of sex-based wage discrimination.<sup>41</sup>

The decade also marked a shift in the focus of comparable worth, which continues today. At Rather than seeking to apply the approach to the wage-setting practices of the federal government alone, proponents have tried to extend comparable worth to all employers subject to the Fair Labor Standards Act (FLSA)—predominantly firms in the private sector. The Fair Pay Act, which has been introduced in each Congress since the 103<sup>rd</sup>, would require that employees within an FLSA-covered firm who work in dissimilar but *equivalent* jobs—when viewed as a composite of skill, effort, responsibility, and working conditions—be paid equal wages regardless of *sex*, *race*, *or national origin*. The bill thus would expand the standard in the Equal Pay Act of 1963 (EPA, an amendment to the FLSA), which makes it illegal for covered employers to pay different wages to men and women who hold jobs that require substantially the same skill, effort, and responsibility and that are undertaken in similar working conditions. Acceptable wage differentials between equivalent jobs would continue to be those based on a seniority or merit system, or

<sup>&</sup>lt;sup>40</sup> Levine, Marvin J. Comparable Worth in the 1980s: Will Collective Bargaining Supplant Legislative Initiatives and Judicial Interpretations? *Labor Law Journal*, v. 38, no. 6, June 1987; and, Cohen, Robert H. Pay Equity: A Child of the 80s Grows Up. *Fordham Law Review*, v. 63, March 1995.

<sup>&</sup>lt;sup>41</sup> For a discussion of comparable worth claims in the courts, see: Libeson, Sandra J. Reviving the Comparable Worth Debate in the United States: A Look Toward the European Community. *Comparative Labor Law Journal*, spring 1995.

<sup>&</sup>lt;sup>42</sup> For current legislative activity, see *Pay Equity Legislation in the 108<sup>th</sup> Congress*, CRS Report RL30902, by Charles V. Dale and Linda Levine.

a system linking pay to the quantity or quality of output. However, the bill would no longer allow "any factor other than sex" to be a legitimate reason for wage differences as it currently is under the EPA. The EPA prohibition against achieving its equal pay standard by reducing the wage of any employee would remain in force. In contrast, the Paycheck Fairness Act, which also has been introduced in several Congresses, would have the U.S. Department of Labor issue job evaluation guidelines based on objective criteria (e.g., education, skill, and decision-making responsibility) for *voluntary* use by employers.

Occupational Desegregation as a Remedy to the Wage Gap? The comparable worth approach to wage determination is endorsed by those who believe that the prohibition of gender discrimination in the Equal Pay Act of 1963, Title VII of the Civil Rights Act of 1964, and E.O. 11246 is not sufficient to reduce the malefemale pay differential because of the intransigence of sex segregation in the workplace. They point out that, even if one thought workplace integration were an adequate remedy to the wage gap, it would take an extremely long time to achieve pay equity given the very slowly growing similarity in women's and men's occupational distributions. (See page 6-7 of this report.)

Comparable worth adherents further observe that occupational desegregation as a remediation approach has its own drawbacks.

Since the influx of women continues to be largest in those occupations where it began, some initially male jobs have now "tipped" and become disproportionately female. Thus, further increases in the proportion of women in these jobs increase rather than decrease segregation.<sup>43</sup>

Because occupational desegregation and job desegregation are not necessarily the same, proponents also contend that the increased occupational similarities between the sexes may overstate integration's potential impact on relative wages. Within the occupation of bus drivers, for example, women tend to hold part-time low-paying jobs driving school buses while men tend to hold relatively high-paying jobs driving buses for city transit systems. It thus is asserted that the growing presence of women in nontraditional occupations may have unexpected outcomes — namely, resegregation as well as "ghettoization," with women and men having the same occupational titles but working in different specialties — which limit its ability to reduce the wage gap.<sup>44</sup>

Comparable worth advocates point out that occupational desegregation does not address directly the low wages of workers in female-dominated occupations.<sup>45</sup> They question whether it is reasonable to expect numerous women in the middle or near the end of their worklives to pay twice: after having paid the first time through lower wages induced by occupational crowding, they would have to pay a second time through costs associated with changing jobs (i.e., forgone wages and benefits like

<sup>&</sup>lt;sup>43</sup> England, *Comparable Worth*, p. 16.

<sup>&</sup>lt;sup>44</sup> Reskin, Barbara F., and Patricia A. Roos. *Job Queues, Gender Queues: Explaining Women's Inroads into Male Occupations*. Philadelphia, Pa., Temple University Press, 1990.

<sup>&</sup>lt;sup>45</sup> Bergmann, *The Economic Emergence of Women*.

pensions as well as educational/retraining expenses). A comparable worth policy would raise the wages of workers in traditionally female occupations who are unable or unwilling to change jobs.

Critics of comparable worth respond that the wage gap has in fact been narrowing because the productivity-related characteristics of working women have come to more closely resemble those of men. Some observers claim that employment discrimination rather than wage discrimination accounts for women's depressed earnings: if more nontraditional jobs were open to women, the wage gap would shrink (1) because female entrants to these occupations would receive higher pay and (2) because the supply of labor to traditionally female jobs would decrease thereby raising the wages of workers in those positions. According to both these perspectives, comparable worth is not directed at the real issues — namely, gender differences in human capital qualifications, and discrimination in hiring and promotions. While comparable worth opponents consequently might support more active enforcement of current antidiscrimination laws and regulations, they see no need for further government intervention in the market's wage-setting process.

**Job Evaluation as a Wage-Setting Mechanism.** Supporters of comparable worth believe that discrimination results in a misallocation of labor by steering equally productive women and men into different jobs and paying women relatively lower wages. Firms operating in such a labor market produce more of the goods/services that use "underpaid" female workers and less of the goods/services that use "overpaid" male workers than they would if the market were free of gender bias. Comparable worth advocates therefore reason that action is needed

to correct the market wage to remove the distortions caused by discrimination, [that is, to] bring wages closer to what they would be in a non-discriminating market, thus increasing efficiency and productivity.<sup>46</sup>

According to this viewpoint, it is discrimination rather than comparable worth policy that interferes with the optimal functioning of the labor market. Job evaluation is the mechanism that comparable worth advocates usually propose to use for both redefining the status hierarchy of jobs as it relates to relative wages<sup>47</sup> and for adjusting market wages.

This is the fundamental problem with comparable worth according to its critics, namely, the substitution of job evaluation for market conditions in the wage-determination process.

<sup>&</sup>lt;sup>46</sup> Peterson, Janice. The Challenge of Comparable Worth: An Institutionalist View. *Journal of Economic Issues*, v. 24, no. 2, June 1990. p. 607.

<sup>&</sup>lt;sup>47</sup> It has been suggested that the amount of controversy over comparable worth relates to its being about more than wages. In the view of some individuals, comparable worth "challenges basic cultural assumptions about the relative value of the activities of different groups in society." It also "would redistribute not only economic resources, but also labor market *power* to women workers." Steinberg, Ronnie J. A Want of Harmony: Perspectives on Wage Discrimination and Comparable Worth, p. 24-25, in Remick, Helen (ed.) *Comparable Worth and Wage Discrimination: Technical Possibilities and Political Realities.* Philadelphia, Pa., Temple University Press, 1984.

Wages differ not only because different jobs require different levels of skill, effort, or responsibility, but also because of the inherent scarcity of certain skills and talents relative to society's demand for such skills and talents.<sup>48</sup>

Some jobs may have a high "value-in-use" as measured by the inputs of skill, effort, and responsibility, but they may not warrant a high wage (i.e., "value-in-exchange" for labor services) if there is a plentiful supply of workers to perform them. 49 Because of varying occupational supply/demand conditions, legitimate (non-discriminatory) pay differentials can exist between jobs that evaluations conclude are of equal value to employers.

Moreover, opponents assert that a requirement to equalize wages of jobs having the same total scores on evaluations would not allow the market to efficiently allocate labor across occupations. If sewing machine operators' wages were raised based on job evaluation findings, for example, the higher wages would prompt more workers than otherwise to enter the occupation. Because the demand for sewing machine operators did not change, however, firms would be unwilling to hire these new entrants and unemployment would increase. The wage determined by job evaluation would have sent an incorrect signal to workers, with misallocation of labor resources the result. Further, if demand for sewing machine operators were to subsequently increase, comparable worth would prevent firms from using higher wages to effectively signal this to workers: if they wanted to offer higher wages to attract more sewing machine operators, firms would also have to offer higher wages for other jobs found to be of equal and higher value — even though there was an ample supply of labor at the lower wage for the other jobs.

These inefficiencies, and the likelihood of different firms' job evaluations producing varying ratings for the same occupations, have led some critics to predict additional government intervention once comparable worth becomes the law of the land. It is suggested that one form of federal intervention might be the development and administration of a national job evaluation system because the government would be the only entity capable of reconciling (possibly discriminatory) differences between firms in their evaluations' results. Some sort of regulatory or adjudicatory process could well be needed to, at the least, resolve disputes over the specifics of individual firms' evaluations and to decide when evaluations should be revised to reflect changes over time in job content. Another form of intervention might be government in the role of labor allocator: because wages could no longer be used to attract workers to specific jobs under a comparable worth system, the government might have to encourage or direct people into occupations in order to resolve imbalances between supply and demand.

<sup>&</sup>lt;sup>48</sup> Raisian, John with Michael P. Ward, and Finish Welch. Pay Equity and Comparable Worth. *Contemporary Policy Issues*, April 1986.

<sup>&</sup>lt;sup>49</sup> Gunderson, Male-Female Wage Differentials and Policy Responses.

<sup>&</sup>lt;sup>50</sup> Gold, Michael Evan. *A Dialogue on Comparable Worth*. Ithaca, NY, ILR Press, 1983; and, Oi, Walter Y. Neglected Women and Other Implications of Comparable Worth. *Contemporary Policy Issues*, v. 4, April 1986.

Comparable worth proponents respond that they have not endorsed a national job evaluation system, and that it is not unusual for some economists and business groups to make dire predictions about the effects of legislation which would increase government regulation of the labor market. In addition, supporters claim that a comparable worth policy is not intended to measure the inherent value of jobs, but rather to eliminate the wage disparities between female-dominated and male-dominated jobs that cannot be justified by differences in productivity requirements. As to the use of job evaluations in setting wages, comparable worth adherents contend that many firms have long used them and that wages set by market conditions actually are incorporated in job evaluations.

Depending on the type of system used, market wages have varying degrees of influence on the weights (i.e., relative importance) accorded the job attributes in evaluations. In fact, this is one of the problems with relying on job evaluations to achieve comparable worth according to its supporters. They find this drawback to be especially egregious at firms which conduct separate evaluations of female- and male-dominated job families (e.g., clerical workers and blue-collar workers, respectively). It is claimed that the use of multiple pay plans within a firm "is the single most important reason that the common practice of job evaluation has done little to close the sex gap in pay."<sup>51</sup> For this reason, comparable worth advocates not only call for unbiased job evaluations but also for the same evaluation system to be applied across all job families within an establishment.

The job evaluation tool also has been criticized for its complexity and subjectivity.<sup>52</sup> Even before an evaluation is begun, definitions of a firm (e.g., an establishment within a multi-establishment enterprise with(out) regard to proximity of other locations) and of female- as well as male-dominated jobs (e.g., composed 60% or 70% by one sex) must be made. After developing job descriptions for all positions within a firm, the evaluators must select the job attributes or compensable factors to be analyzed. Then, for each job included in the analysis, they must assign a numerical value to each of the chosen attributes. In order to develop a total score for each job, the evaluators also must determine weights for the individual factors. For example, they must decide whether a job's skill component is more important (i.e., given more weight) than a job's supervisory component. After having gone through these several steps, a final decision must be made about how to relate scores to wages and whose wages should be adjusted (e.g., should the wages of all underpaid jobs be raised or just underpaid female-dominated jobs; should the wages of overpaid jobs be reduced, frozen, or given smaller increases; and, what level should wages be raised to — the average of all jobs or male-dominated jobs with the same total points, or some proportion of the difference between female- and maledominated jobs with the same total points). Comparable worth opponents argue that the decisions required at each stage of this complex procedure provide an opportunity for the biases of evaluators and others to affect the outcome.

Supporters of comparable worth acknowledge the possibility of bias by noting that job evaluations as typically conducted often have favored "men's work" over

<sup>&</sup>lt;sup>51</sup> England, *Comparable Worth*, p. 219.

<sup>&</sup>lt;sup>52</sup> Raisian, Ward, and Welch, Pay Equity and Comparable Worth.

"women's work." Sources of bias against women in job evaluations include: writing job descriptions that omit some compensable factors typical of women's jobs, giving lower ratings to women's jobs on the factors that are included, weighting factors typical of men's jobs (e.g., unsafe working environment) more heavily than those typical of women's jobs (e.g., finger dexterity), and using separate evaluations of job families predominated by men and by women. Because of these practices, comparable worth proponents want bias-free evaluations to be conducted. The policy's detractors suggest, however, that what actually could occur is the substitution of one set of biases for another.

The Economic Effects of Implementing Comparable Worth. Critics of comparable worth expect that its efforts to raise wages in female-dominated occupations could harm women through disemployment. If employers must raise wages of female-dominated jobs deemed to be underpaid by job evaluations, employment in those occupations will decrease unless demand is totally inelastic (i.e., demand does not change in response to a change in the wage). The higher labor costs resulting from comparable worth pay raises could lead firms to replace workers in previously underpaid positions with now cheaper labor-saving technology. In addition, the resultant increase in production costs could prompt a decrease in output and total employment, or an increase in prices to consumers. The outcome of implementing comparable worth under this scenario would be both reduced employment in traditionally female jobs and higher wages for the women still employed in those fields.

Opponents of comparable worth also expect its implementation would cause the wages of some women to fall. This is because some sectors or groups (e.g., small firms or part-time workers) often are not covered when a law is enacted.<sup>53</sup> Specifically with regard to a comparable worth policy, it is more likely that medium and large firms rather than small firms (e.g., those with fewer than 100 employees) would be covered because numerous different job titles are needed to conduct a job evaluation and because the cost of using job evaluations decreases as firm size increases.<sup>54</sup> Women who either were displaced from or were unable to get jobs in the part of the economy covered by comparable worth legislation would increase the supply of labor in the uncovered sector, thereby putting downward pressure on their own wages as well as the wages of other uncovered workers with whom they would most directly compete (e.g., other women).

The results of one analysis suggest that, if comparable worth were implemented with a small firm exemption, it could well help higher-paid women (more often employed by large firms) and harm lower-paid women (more often employed in small firms). Moreover, it appears that "occupational segregation is highest in the

<sup>&</sup>lt;sup>53</sup> For example, the comparable worth policy in Ontario, Canada exempts private sector firms with fewer than 10 employees. Among covered firms, those with fewer than 100 employees are treated somewhat differently than larger firms. U.S. General Accounting Office. *Pay Equity: Experiences of Canada and the Province of Ontario*, GGD-94-27BR. Washington, D.C., November 1993.

<sup>&</sup>lt;sup>54</sup> Smith, Richard S. Comparable Worth: Limited Coverage and the Exacerbation of Inequality. *Industrial and Labor Relations Review*, v. 41, no. 2, January 1988.

sector least likely to be the target of comparable worth policies and lowest in the sector most likely to be covered."55

Comparable worth advocates concede that there could be trade-offs for elevating wages in traditionally female occupations. But, as this is true of many policy initiatives, they do not consider it an adequate reason for maintaining the status quo. How much comparable worth actually would cost depends, in part, on "how many workers are displaced, how quickly, and what happens to them. At present, we simply do not know how severe these problems would be." <sup>56</sup>

Some believe that indirect benefits might flow from comparable worth's direct costs. Women no longer able to get traditionally female jobs after the upward adjustment of the jobs' wages might "leave the safe harbor of the female occupations and consider competing for jobs heretofore filled with males," 57 while men might be more attracted to the now higher paying, traditionally female jobs. On the demand side, if a firm funds its comparable worth adjustment by giving female-dominated jobs larger wage increases than male-dominated jobs, men might be paid less than they could get at other firms. Should the firm's employees in male-dominated jobs leave for greener pastures, it could provide an incentive to hire women as trainees for the vacant, traditionally male jobs. In these ways, the implementation of comparable worth might encourage occupational desegregation.

Comparable Worth's Potential Impact on the Wage Gap. Comparable worth is intended to eliminate pay differences between jobs within a firm that are related to an occupation's sex composition. Given its intrafirm focus, the policy will not affect the portion of the gender wage gap that is due to other manifestations of workplace segregation, including differences between the firms (e.g., large versus small) or industries (e.g., manufacturing versus services) in which women and men typically work.<sup>58</sup> In order to estimate the potential effect on the wage gap of enacting comparable worth legislation, then, studies should control for job characteristics as well as measures of productivity in order to separate their impact from that of occupational segregation.

Generally, the more variables included in empirical analyses of the causes of the wage gap, the smaller the portion related to an occupation's gender composition. Studies that use different units of analysis (e.g., occupations or individuals) also estimate varying magnitudes for the "wage penalty" caused by working in female-dominated rather than male-dominated occupations. Analyses that take into account

<sup>&</sup>lt;sup>55</sup> *Ibid.*, p. 237.

<sup>&</sup>lt;sup>56</sup> Blau, Ferber, and Winkler, *The Economics of Women, Men, and Work*, p. 225.

<sup>&</sup>lt;sup>57</sup> Bergmann, Barbara R. Does the Market for Women's Labor Need Fixing? *Journal of Economic Perspectives*, v. 3, no. 1, winter 1989. p. 57.

<sup>&</sup>lt;sup>58</sup> According to one estimate, 31%-38% of the observed wage gap may be explained by differences in women's and men's employment distribution by industry and by differences in their pattern of interindustry wage differentials. Fields, Judith, and Edward N. Wolff. Interindustry Wage Differentials and the Gender Wage Gap. *Industrial and Labor Relations Review*, v. 49, no. 1, October 1995.

the industry of employment produce smaller estimates of the effect of occupational segregation on the wage gap than do other studies. Results also can vary because of differences in time periods analyzed. For these reasons, studies have produced a wide range of estimates for the effect of an occupation's gender composition on the wage gap (0% to 42%, according to one review). Given the breadth of this range, empirical research conducted to date provides little guidance as to the potential impact of a comparable worth policy on the gender wage gap.

A more definitive answer about the potential magnitude of comparable worth's impact on the wage gap also is lacking based on studies of state and local governments' implementation of the policy. Analyses conducted before the policy went into effect in five state governments and in San Jose, California predicted that women's relative wages would rise by 15%. The researchers assumed that, when implemented, the policy would increase the pay in female-dominated jobs to the pay in male-dominated jobs deemed equivalent through job evaluation. In reality, however, most of the governments included in the two studies raised the wages of all underpaid jobs which likely made the actual increase in women's relative wages less than the predicted increase.

Other studies examined the effect of comparable worth on the wage gap after the policy had been implemented.<sup>61</sup> While Iowa's comparable worth policy also called for raising the wages of all (not just female-dominated) underpaid jobs, it originally called for pay cuts as well. In light of union objections, however, a compromise was reached which gave smaller wage increases to underpaid jobs in return for no pay cuts. A study of the actual experience with comparable worth in Iowa found, not surprisingly, that women's relative pay rose by just 1.4%. In Minnesota, by contrast, most of the comparable worth pay adjustments went to women on the state's payroll and particularly to workers in female-dominated jobs (mainly women, by definition). One study estimated that the state government's comparable worth policy was responsible for almost a 12% increase in women's relative pay.<sup>62</sup> Thus, the manner in which comparable worth is implemented can substantially influence the policy's actual effectiveness in narrowing the gender wage gap.

<sup>&</sup>lt;sup>59</sup> Sorensen, Elaine. *Comparable Worth: Is It a Worthy Policy?* Princeton, NJ, Princeton University Press, 1994. (Hereafter cited as Sorensen, *Comparable Worth: Is It a Worthy Policy?*)

<sup>60</sup> Ibid.

<sup>61</sup> Ibid.

<sup>&</sup>lt;sup>62</sup> In terms of comparable worth's employment effect in Minnesota, it might have resulted in somewhat reduced job growth: while women on the state's payroll actually increased by 17.2% between 1981 and 1988, their numbers would have increased by 20% in the absence of comparable worth (a difference of some 420 jobs); male employment would have risen by 3.9% without the policy instead of 2.9% with the policy (a difference of about 160 jobs). A number of other studies also have shown small employment effects. See, for example, Kahn, Shulamit. Economic Implications of Public-Sector Comparable Worth: The Case of San Jose, California. *Industrial Relations*, v. 31, no. 2, spring 1992.

Misgivings have arisen about how comparable worth has been implemented in some instances, because of the influence this can have on the achievement of pay equity. The "pay for points" approach would, in theory, adjust the wages of all jobs based on their job evaluation score, with overpaid jobs having their pay cut and underpaid jobs having their pay raised. Because of objections from (representatives of) workers whose pay is to be cut, however, this approach typically is compromised such that underpaid jobs receive smaller wage increases than they otherwise would have and no one's pay is reduced.

This compromise "pay for points" approach has three serious weaknesses: (1) it does not achieve the basic purpose of comparable worth — to eliminate the underpayment of "women's work"; (2) it does not target pay adjustments to female-dominated jobs; and (3) it is overly dependent on the job evaluation system. This approach cannot achieve equal pay for comparable worth because it relies on pay cuts to achieve this aim, but these cuts are never enacted. By targeting all underpaid jobs for pay adjustments, this approach increases the cost of comparable worth and undercuts the gains to female workers. Finally, it relies primarily on the job evaluation system to determine salaries, a system that is known to be subjective and arbitrary. A comparable worth policy only needs to eliminate the variation in wages that is negatively correlated with the "femaleness" of a job once job requirements are taken into account. This approach tries to eliminate *all* wage variation once job requirements are accounted for.<sup>63</sup>

It appears that political considerations can erode comparable worth's ability to raise women's relative wages because the interests of a broader constituency come into play.<sup>64</sup>

As with other policies, employers may be able to avoid comparable worth's mandate and thereby both limit its cost to them as well as its effectiveness as a remedy for the gender wage gap. 65 If a comparable worth policy were not universally applied, covered employers could contract out the functions of female-dominated jobs to uncovered firms. Similarly, they might increase their use of part-time or temporary workers if coverage did not extend to these groups. Possibly, jobs could be redefined in order to downgrade female-dominated jobs by shifting their more complex tasks to already higher paid employees (e.g., have managers assume the word processing functions of their secretaries). Jobs might also be redefined in order to raise the wages of particular incumbents whom employers wanted to retain.

**Concluding Remarks.** Whether the proponents of the human capital explanation or the discrimination explanation are correct about the underlying reasons for the gender wage gap, the same end result is expected according to standard economic analysis — namely, depressed wages. Whether women limit their fields of work in order to fulfill family responsibilities or discrimination confines women to certain jobs, the market's wage response is the same: the abundant supply

<sup>&</sup>lt;sup>63</sup> Sorensen, Comparable Worth: Is It a Worthy Policy?, p. 131-132.

<sup>&</sup>lt;sup>64</sup> Ames, Lynda J. Fixing Women's Wages: The Effectiveness of Comparable Worth Policies. *Industrial and Labor Relations Review*, v. 48, no. 4, July 1995.

<sup>65</sup> Raisian, Ward, and Welch, Pay Equity and Comparable Worth.

of women to certain jobs relative to employer demand will prompt firms to use more women than otherwise and, in hiring each new worker, spread complementary inputs (e.g., capital) more thinly; this, in turn, decreases the productivity of workers in female-dominated jobs, and consequently, their earnings.

In neither the human capital nor the crowding model are the wages of predominantly female jobs necessarily depressed because employers (un)consciously decide that particular jobs should be devalued, that is, worth relatively low wages. Rather, it is the presence of numerous qualified persons ready to fill those jobs that removes the firm's incentive to offer higher wages in order to attract more workers or to keep from losing workers already on the payroll.

Regardless of the reason for pay differentials, they are economically desirable from the perspective of an efficiently functioning labor market. Wage differentials encourage workers, especially new entrants, to seek higher paying jobs;<sup>66</sup> and, they encourage firms to use more of the plentiful source of labor. If comparable worth were mandated, however, both these incentives would disappear. With wage differentials between "equivalent" female- and male-dominated jobs gone, the strongest motivation for women to overcome discrimination in the long run would be lost. In addition, female unemployment would increase in the short run without wage differentials to encourage workers to exit from or not enter crowded, traditionally female jobs. Comparable worth also would adversely affect the allocation of labor among occupations in which wage differentials might not be due to discrimination.

While the advocates of comparable worth have a plausible and empirically supportable case that discrimination is responsible for a substantial portion of the male-female wage gap, the policy itself offers a limited solution (i.e., raising the wages of workers in traditionally female jobs) which cuts two ways with respect to gender equity: (1) increasing unemployment in female-dominated fields, and (2) reducing women's incentive to further integrate male-dominated jobs. These economic costs may be worth incurring, but that is a judgment for policymakers to make.

 $<sup>^{66}</sup>$  Even if women are traditionally excluded from higher paying jobs, the incentive still exists for them to try to obtain better positions. To the extent that women encounter discrimination in this effort, it is of the type that current law exists to remedy.

#### **Appendix**

H.R. 5680 passed the House in the 98<sup>th</sup> Congress but became stalled in the Senate. Title I of the bill, the Federal Pay Equity and Management Improvement Act of 1984, specified that a study of the federal classification systems be conducted to see if they discriminated against women. S. 958, the Civil Service Amendments Act of 1984, did not include such a study. After passage of S. 958, no conference committee was appointed.

The Senate subsequently voted down an amendment to a continuing resolution that would have adopted H.R. 5680. During consideration of the amendment, a compromise was reached on a pay equity study. In return for passage of a bill to reform the merit pay system and to reorganize the senior executive service, the following plan was agreed to: the General Accounting Office (GAO) would report on methodologies for conducting a pay equity study of the federal classification systems; hearings would be held on the GAO report; and, legislation would be introduced to authorize a pay equity study based on GAO's findings.

GAO issued *Options for Conducting a Pay Equity Study of Federal Pay and Classification Systems* (GAO/GGD-85-37), which discussed two approaches for determining why some female federal employees earn less than male federal employees. An economic analysis would measure and explain current gender wage differentials on the basis of employee characteristics (e.g., educational attainment and seniority). A job content analysis would examine job characteristics (e.g., skill level and working conditions). In GAO's view, an effective pay equity study would use both analyses.

During the 99<sup>th</sup> Congress, House and Senate committees held hearings on the GAO report. The House Committee on Post Office and Civil Service reported out H.R. 3008, the Federal Equitable Pay Practices Act of 1985. It would have established a Commission on Equitable Pay Practices which was required to contract with a private consultant, chosen from a list of experts drawn up by GAO, to conduct a pay equity study employing both an economic analysis and a job evaluation. The consultant's study and Commission recommendations were then to be forwarded to the President and the Congress. The House passed the bill as amended and referred it to the Senate Committee on Governmental Affairs. In the Senate, the Subcommittee on Civil Service held hearings on a similar bill, S. 519 (the Federal Employee Anti-Sex-Discrimination in Compensation Act of 1985), and S. 5, the Pay Equity Act of 1985, was proposed as well.

H.R. 387, the Federal Equitable Pay Practices Act of 1988, was introduced during the 100<sup>th</sup> Congress and was passed by the House. It was identical to the 99<sup>th</sup> Congress' H.R. 3008. S. 5, the Pay Equity Act of 1987, also was reintroduced but in a substantially revised form. It was a broad bill requiring, among other things, that the Equal Employment Opportunity Commission develop guidelines for eliminating discriminatory wage-setting practices in the federal government and among federal contractors as well as furnish a report detailing its activities under the Equal Pay Act; in addition, a Commission on Compensation Equity was to select a consultant who would conduct a pay equity study of the federal government's pay system. The pay

equity study included in S. 552, the Federal Employee Compensation Equity Act of 1987, was similar to S. 5's study, with both bills calling for the conducting of an economic analysis and a job evaluation. The Senate took no action on this legislation.